

## INTRODUCTION

Milling and hole making operations are an integral part of all metal cutting operations. While using a precision machine tool such as a CNC Machining centre for complex milling and hole making operations, selection of the right cutting tools for the operations is equally critical to producing quality machined parts. Selection of the right cutting tools can result in optimization of cycle time, reduce risks of errors in machining, manage tool costs better and result in the production of a high-quality part.

CNC machines have become the order of the day in every manufacturing industry. These applications are widespread in mass production units, batch production as well as in tool room industries. Thorough understanding of Programming and Operation of the CNC machines is a must in order to realize the maximum output.

This programme will address the programming and operation of CNC Machining centres in detail including finer aspects like control of dimensions and optimization of machining parameters. The participants will be trained hands-on in production CNC machines with real time machining exercises.

Keeping this in view, Indian Machine Tool Manufacturers' Association is organising 5 days training programme on **Mastering Manufacturing Process :Optimization through right selection of Cutting Tools and Cutting Parameters in Milling Applications** .

## FOCUS AREAS

- Machine Technology – CNC Machining Centre Machining Mechanics
- Introduction to Manufacturing Processes
- Machining operations
- Understanding of Tool Nomenclature and cutting parameters
- Essentials of Process Planning
- Selection of cutting tools for milling and hole making operations
- Programming and operation of CNC Machining centres.
- Cycle time calculation of Milling operations.
- Demo of sample component machining on CNC Machine

## KEY TAKE AWAYS

After undergoing the programme, the participants will be able to

- Understanding of various manufacturing processes
- Knowledge on selection of right tool for required applications.
- Understanding of cutting parameters
- Understanding of programming and operation on CNC Machining centres
- Learn about a systematic approach to prove the first component in CNC Machine
- Learn about Machining Process optimization and validation for effective CNC machining.
- Understanding the best practices in the CNC machining area through the right methodology

## PARTICIPATION FEE

**Rs. 12000/-**  
+18% GST

**IMTMA Members/ Micro Companies/  
IMTMA Non Members/ Others**

**Rs. 8000/-**  
+18% GST

**Individuals/ Educational Institutions /  
Students**

**USD 480/-**  
**Overseas Participants**

**Group Concession : 10% for 3 to 5 and 20% for 6 and more delegates being nominated from the same company**

## FACULTY

This program will be conducted by **Mr. Yuvaraj Patil, and Other Industry Experts.**

**Mr. Yuvaraj Patil** is a mechanical engineer having more than 16 years of experience in CNC Machine Shop & Tool Room. He has worked with various companies – ASB International, Videocon, Menon & Menon and PARI. Additionally, he has 10+ years of experience in training engineers in CNC Machining area with hands-on practice he has trained 3500+ Industry professionals in the CNC Machining area, Dimensional Metrology, and Inspection. And trained 500+ fresh graduate mechanical engineers in Production engineering for making engineers industry ready. Also, he has conducted the training program on Machining fundamentals, Machining Defects Analysis, Cost & Cycle Time Reduction, Dimensional Metrology, and GD & T for Sigma Electrical, Maruti Suzuki, Volkswagen, Mahindra, Fleetguard, Bajaj Auto, Advik Hitech and ENPRO.

### For Registration Contact

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**REGISTRATION :** Prior registration for participation is necessary. Number of participants is limited and will be accepted on ‘First Come First Serve’ basis. A Certificate of participation will be issued to participants.  
**Important Information :** Participation fee includes, course material, working lunch and tea / coffee. Interested companies are requested to register online by clicking on 'REGISTER' button and by filling up the nomination authority and participant's details in specified form.